

# Proposed Changes to the Fishery Management Plan for Pacific Salmon

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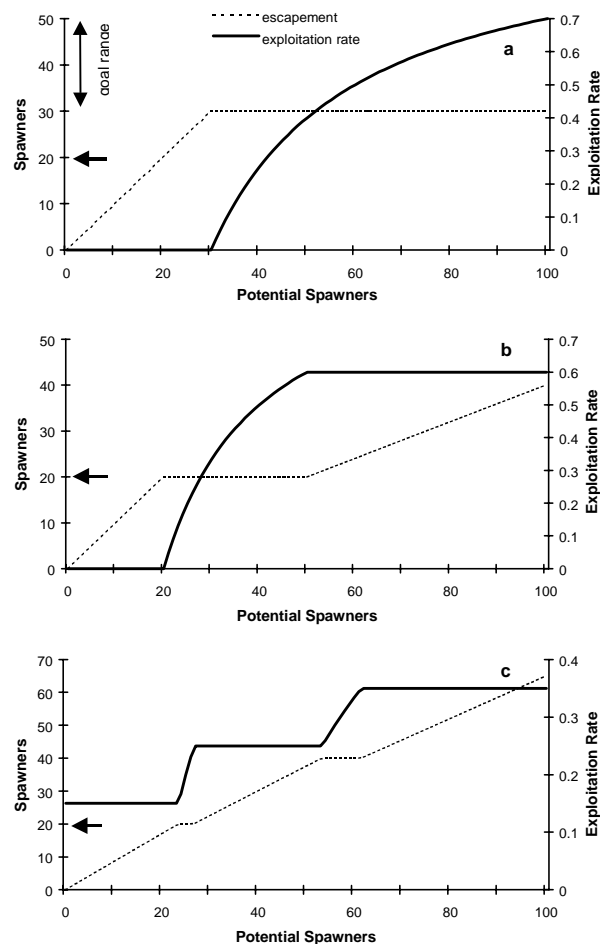
A draft proposal for Amendment 14 to the Pacific Salmon Fishery Management Plan (FMP) is currently being developed by NMFS Northwest Region. The intent of the amendment is to make the FMP more consistent with the findings of coastwide status reviews conducted by NMFS under the Endangered Species Act (ESA), and to bring the FMP in compliance with the proposed National Standards Guidelines being developed by NMFS.

The Pacific Salmon FMP currently includes chinook, coho, and pink salmon, and sockeye salmon from Puget Sound. Amendment 14 proposes to drop sockeye salmon from the FMP and subdivide the management unit of the Pacific Salmon FMP into components corresponding roughly to evolutionarily significant units (ESUs) identified in the coastwide ESA status reviews for the remaining 3 species. Differences between the management unit components and ESUs include: coho and chinook salmon from streams entering the Strait of Juan de Fuca west of the Elwha River were placed in Washington coastal ESUs but are included with Puget Sound management components; fall chinook salmon from the lower Klamath River tributaries were placed in the coastal chinook salmon ESU but are included with the upper Klamath basin for management purposes; even-year and odd-year ESUs of pink salmon in Puget Sound were combined into a single management component.

The FMP for Pacific salmon currently defines overfishing as the failure to meet an FMP management objective for 3 consecutive years. Amendment 14 proposes to retain the current overfishing definition with the addition of annual abundance and fishing mortality thresholds which depend on the type of management objectives defined for individual stocks.

FMP management objectives currently fall into 3 categories: fixed spawner escapement or escapement range policies, constant exploitation rate policies with a minimum spawner escapement, and stepped exploitation rate policies where the target exploitation rate depends on forecast stock size and marine survival. These thresholds are proposed as proxies to the National Standards guidelines of  $\frac{1}{2}$  MSY biomass and MSY fishing mortality rate. For fixed escapement policies, the pro-

posed abundance threshold is  $\frac{1}{2}$  of the midpoint of the goal range, and the fishing rate threshold is the exploitation rate necessary to meet the lower bound of the escapement goal range (Figure 1a). For constant exploitation rate policies, the proposed abundance threshold is the minimum spawner escapement, and the mortality rate threshold is the exploitation rate goal (Figure 1b). For the stepped exploitation rate goal, the proposed abundance threshold is the breakpoint between low and critical spawning escapements (Figure 1c).



**Figure 1.** Thresholds for defining overfishing proposed in Amendment 14 to the Pacific Salmon Fishery Management Plan. Abundance thresholds are indicated by the arrow on the Spawner axis and fishing rate thresholds are indicated by the exploitation rate for (a) fixed escapement policy, (b) constant exploitation rate policy, and (c) stepped exploitation rate policy.